



**Testimony to the Energy & Technology Committee
Testimony by Citizens Campaign for the Environment
Louis W. Burch, Program Coordinator**

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Hartford, CT**

Senator Duff, Representative Reed, distinguished members of the Energy & Technology Committee, thank you for the opportunity to speak today.

My name is Louis Burch, Government Relations Liaison for Citizens Campaign for the Environment (CCE). Supported by over 80,000 members in Connecticut and New York State, CCE works to empower communities and advocate solutions that protect public health and the natural environment. CCE would like to offer the following testimony in support of HB 5409:

HB 5409- AAC Hydraulic Fracturing Waste (SUPPORTIVE)

The extraction of natural gas using hydraulic fracturing (fracking) produces large amounts of liquid and solid waste that can contain a laundry list of harmful pollutants, including salts; chemical additives, such as ethylene glycol, naphthalene, and sulfuric acid; metals; organic compounds; and other contaminants. These pollutants include chemical additives in fracking fluid, as well as naturally-occurring contaminants that exist thousands of feet below the surface and are mobilized by the extraction process and come up the well along with drilling muds (used as a lubricant during the drilling process), fracking fluids, and the gas itself. Fracking waste from extraction activities in the Marcellus Shale can also contain naturally-occurring radioactive materials (NORMs) such as radium-226 and radium-228.

Unfortunately, exploration and production waste from oil and gas fields are exempt from consideration as hazardous waste under federal standards (RCRA Subtitle C). This *hazardous waste loophole* allows gas companies to transport and dispose of toxic fracking waste products without categorizing it as hazardous waste and handling or treating it as such. This process leaves communities vulnerable to exposure to a range of toxic substances, as traditional sewage treatment plants and industrial waste treatment facilities are not designed to remove or treat hazardous waste.

Because of this hazardous waste loophole, drill cuttings, sludge, fracking sand, and other waste materials from fracking can be sent to landfills for disposal, transported in unmarked trucks, and recycled for use as a road spreading agent. The contaminants found in fracking are also present in these materials and can lead to concentrated levels of contamination.

Fracking wastewater headed to sewage treatment facilities can carry any of the previously mentioned chemical constituents as well as high levels of salts and radioactive material. Most sewage treatment facilities are not equipped to adequately treat and dispose of this toxic cocktail.

Evidence from Pennsylvania has demonstrated that fracking wastewater can wreak havoc if sent to certain municipal wastewater treatment plants, causing equipment corrosion and water pollution. A 2011 investigative report from The New York Times showed that over a three-year period in Pennsylvania the industry sent more than a billion gallons of fracking wastewater to treatment plants unequipped to handle it, causing the plants to discharge the partially treated wastewater into Pennsylvania's waterways. A study from Duke University examined discharged effluent and downstream water quality from a wastewater treatment facility accepting fracking wastewater in western Pennsylvania. Researchers found increased downstream concentrations of chloride and bromide, and reported that, while radioactive concentrations in effluent were largely reduced, they were not eliminated, meaning that radioactivity could accumulate over time at the point where treated wastewater is discharged. In fact, researchers found that radioactivity concentrations in sediment at the point of discharge were 200 times higher than upstream sediment concentrations.

In addition to concerns around acceptance of fracking wastewater, there have been media reports that some wastewater treatment facilities are currently receiving leachate (liquid that drains from a landfill and can pick up contaminants contained in the landfill waste) from landfills which accept fracking solid waste.

Closing the hazardous waste loophole is an important step in protecting the health of Connecticut's communities; therefore **CCE supports HB 5409 and respectfully urges this committee to pass it as soon as possible.**

On behalf of our members in Connecticut, we appreciate the opportunity to provide testimony and look forward to working with you on these important issues.